This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1. (currently amended) A ball mounting apparatus for mounting a plurality of balls D4 sucked up to a head on a workpiece, said ball mounting apparatus comprising:

a positioning mechanism for positioning said workpiece;

a ball supply device for supplying said balls;

said head for sucking up said balls;

an energized force generating device for energizing said head in an upward direction;

a clamping device [for clamping] operable to clamp said head in a condition in which said energized force generating device stores an energized force, said clamping device comprising a clamping surface mounted to said head, and a rigid lower positioning stop configured for engagement with the head's clamping surface, wherein moving the head's clamping surface into engagement with the lower positioning stop clamps the head in a clamped position in which the force generating device stores an energized force; and

a moving mechanism for moving said head.

2. (currently amended) The ball mounting apparatus according to claim 1, wherein said energized force generating device is a spring member, and said spring member provides said energized force which is able to lift said head above ~~a~~ the lower positioning stop constituting a part of said clamping device.

3. (currently amended) The ball mounting apparatus according to claim 1, wherein said clamping device further comprises a cylinder configured to apply a vertical positioning force to said head ~~and a lower positioning~~.

4. (original) The ball mounting apparatus according to claim 1, wherein said workpiece is fixed on a holding table by bellows-shaped suction pads.

D4 cont'd

5. (currently amended) A ball mounting method for mounting a plurality of balls sucked up by a head on a workpiece, said ball mounting method comprising the sequential steps of:

clamping the head by moving the head into a position in which a clamping surface mounted to the head is engaged with a rigid lower positioning stop;

moving ~~a~~ the clamped head above a ball supply section;

sucking up said balls to said head;

moving said head above said workpiece;

releasing a force clamping said head to allow the clamping surface to move out of engagement with the rigid lower positioning stop;

mounting said balls sucked up to said head on said workpiece while the head is not clamped;

clamping said head by again moving the head into a position in which the clamping surface is engaged with the rigid lower positioning stop; and

again moving said head above said ball supply section.

6. (original) The ball mounting method according to claim 5, wherein in the step of clamping said head, a force clamping said head is in the range of about 2Kgf to 30Kgf.

7. (original) The ball mounting method according to claim 5, wherein in the step of sucking up said balls to said head, a total of said balls occupies about 5 to 80 % by area of a bottom area of a container.

8. (original) The ball mounting method according to claim 5, wherein the step of sucking up said balls to said head includes sucking up again said balls to said head

after temporarily stopping sucking up the balls and dispersing agglomerated balls while sucking up said balls.

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9. (original) The ball mounting method according to claim 5, further comprising the steps of:

counterbalancing a weight of said head sucking up the balls substantially to zero;

lowering each tip of said balls to a bottom of a flux layer; and

applying flux to said balls.

10. (original) The ball mounting method according to claim 5, wherein the balls are conductive, the method further comprising a step of applying a conductive adhesive to said balls.

11. (currently amended) The ball mounting method according to claim 5, wherein in the step of mounting said balls sucked up to said head on said workpiece, a force clamping the head with a pressure of a cylinder to ~~a~~ the rigid lower positioning stop constituting a part of a clamping device for the head is less than or equal to about 1Kgf.

12. (original) The ball mounting method according to claim 5, further comprises a step of dropping said balls remaining on said head by knocking said head with a hammer, after the step of mounting said balls on said workpiece.

13. (original) The ball mounting method according to claim 5, wherein in the step of mounting a plurality of said balls sucked up to said head on said workpiece, a weight of said head is substantially zero by counterbalancing the weight of said

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head by an energized force of an energized force generating device by releasing a pressure of a cylinder clamping said head.